

REMARKS

Claims 5 and 13 remain pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 5 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Baude (U.S. Pat. Pub. No. 2003/0150384) in view of Hirayanagi et al (U.S. Pat. No. 6,171,736) and Maldonado (U.S. Pat. No. 4,964,145). Claims 5 and 13 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Baude (U.S. Pat. Pub. No. 2003/0150384) in view of Hirayanagi et al (U.S. Pat. No. 6,171,736) and Burkhart (U.S. Pat. No. 5,923,521). These rejections are respectfully traversed.

Claim 5 calls for a mask vapor deposition device comprising: a deposition mask including silicon and provided with an electrode arranged interdigitally in a mask pattern portion, the mask having a wiring connected to the electrode to supply a charge to a mask pattern section, the deposition mask having an electrostatic chucking mechanism for attracting a subject for deposition using electrostatic attraction generated in the mask pattern section and controlling a depositing of deposition material on the deposition subject with a predetermined pattern; an evaporation source for evaporating the deposition material; and a unit for supplying the charge to the mask pattern section. At least the deposition mask and the evaporation source are placed in a vacuum chamber.

Claim 13 calls for an apparatus for manufacturing a display panel so that an organic compound, which is used for forming electroluminescent elements, is deposited

on a glass substrate with a predetermined pattern. The apparatus comprises: a deposition mask including silicon and provided with an electrode arranged interdigitally in a mask pattern portion, the mask having a wiring connected to the electrode to supply a charge to a mask pattern section, the deposition mask having an electrostatic chucking mechanism for attracting a subject for deposition using electrostatic attraction generated in the mask pattern section and controlling a depositing of a deposition material on the deposition subject with a predetermined pattern; an evaporation source for evaporating the organic compound; and a unit for supplying the charge to the mask pattern section. At least the mask and the source are placed in a vacuum chamber.

Thus, claims 5 and 13 both call for the deposition mask to include an interdigital electrode and a wiring connected to the electrode. None of the prior art references teach or suggest this configuration. Further, both claims 5 and 13 call for the deposition mask to have an electrostatic chucking mechanism. Baude fails to teach a mask having this feature. The remaining references also fail to teach a mask having this feature. Moreover, the claimed electrostatic chucking mechanism attracts a "subject for deposition" using electrostatic attraction generated in the mask pattern section. As such, the "subject for deposition" (not the mask) is attracted so that warp is corrected. Again, no prior art reference teaches such attraction.

Thus, in the claimed invention, the subject for deposition is attracted and retained by electrostatic chucking in the mask so that warp in the subject for deposition is corrected. Since an electrostatic chuck is used, the deposition mask can be prepared using a material such as silicon that is not attracted by a magnet. By eliminating such magnetic attraction, shock can be prevented which enhances deposition precision.

Even more advantageously, in the claimed invention, the deposition mask has the electrostatic chucking function. Since the deposition mask attracts the subject for deposition using the electrostatic chucking, the adhesion between the mask and the subject for deposition is increased.

Although Baude may suggest a vacuum chamber for preventing a mask from sagging, Baude is silent with respect to correcting warp in a substrate using the claimed features discussed above. Similarly, although Hirayanagi may disclose an electrode for attracting a reticle to a reticle chuck, Hirayanagi is silent with respect to attracting a subject for deposition to a mask using the claimed features discussed above. Accordingly, even if Baude is combined with Hirayanagi, one skilled in the art could not arrive at the claimed invention.

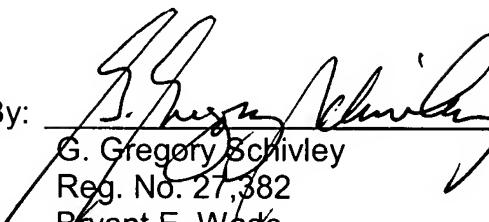
In view of the foregoing, reconsideration and withdrawal of these rejections are respectfully requested.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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